## **CLAIMS**

## What is claimed is:

1. A method of screening for agents for treating asthma in a human, comprising:

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- (a) contacting a Gob-4 protein with a test agent thought to be effective in inhibiting the activity of said Gob-4 protein;
- (b) determining if said test agent inhibits the activity of said Gob-4 protein, wherein determining if said test agent inhibits the activity of said mammalian Gob-4 protein comprises quantitating the amount of mucus produced by staining said mucus with a periodic-acid Schiff stain; and

stain, and

(c) classifying said test agent as an agent for treating asthma if said test agent inhibits the activity of said Gob-4 protein.

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